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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/684,097	10/10/2003	Eric Baugh	HSJ920030193US1	3023

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ARNOLD K. FIESER
353 CAMINO ELEVADO
BONITA, CA 91902-2430

EXAMINER	
PAUL, DISLER	
ART UNIT	**PAPER NUMBER**
2615	
MAIL DATE	**DELIVERY MODE**
01/24/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	**Application No.** 10/684,097	**Applicant(s)** BAUGH ET AL.	
	Examiner Disler Paul	**Art Unit** 2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on ____.
2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *27-30 and 37-45* is/are pending in the application.
  4a) Of the above claim(s) ____ is/are withdrawn from consideration.
5)☒ Claim(s) *27-30 and 37-44* is/are allowed.
6)☒ Claim(s) *45* is/are rejected.
7)☐ Claim(s) ____ is/are objected to.
8)☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on ____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  a)☐ All b)☐ Some * c)☐ None of:
    1.☐ Certified copies of the priority documents have been received.
    2.☐ Certified copies of the priority documents have been received in Application No. ____.
    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
  * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
  Paper No(s)/Mail Date ____.
4) ☐ Interview Summary (PTO-413)
  Paper No(s)/Mail Date. ____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claim 45 is rejected under 35 U.S.C. 102(a) as being anticipated by Hoshino et al. (US 6,523,413 B1).

Re claim 45, While, Hoshino et al. disclose of the method for characterizing electronic-device vibroacoustics comprising: substituting a vibroacoustic emulator for a hard-disk drive in an electronic device (fig.1,3,5); generating controlled vibroacoustics with the vibroacousitc emulator (fig.1; col.1 line 40-55); measuring a quantity related to system vibroacoustics (fig.5; col.5 line 50-54; col.6 line 25-31; fig.6), wherein the controlled vibroacoustics generated with the vibroacoutic emulator comprises a vibratory out-of-plane force (col.9 line 50-55) .

Allowable Subject Matter

1. Claims 27-30; 37-44 are allowed.

Re claim 27, while, Hoshino et al. disclose of the method for emulating hard-disk-drive vibroacoustics comprising: generating independently controlled acoustic waves initially traveling perpendicular to a base side of a housing.

However, *none of the prior arts of record disclose of the generating independently controlled vibratory motions in directions perpendicular to the base side of the housing; generating independently controlled vibratory motions in directions parallel to the base side of the housing.*

Re claim 37, while, Hoshino et al. disclose of the vibroacoustic emulator for emulating vibroacoustics of a hard disk drive, comprising: a housing having: a base side defining- plane directions parallel to the base side and an out-of-plane direction perpendicular to the in-plane directions; a cover side substantially parallel to the base side; the housing having dimensions and mechanical attachment fixtures that replicate those of the hard disk drive; and a vibroacoustic ,generator coupled to the housing comprising an out-of-plane vibration source.

However, none of the prior art of record disclose of the *wherein the out-of-plane vibration source comprises: a wire coil suspended in a plane substantially parallel to the base side of the housing; a magnetic field producer for producing a magnetic field parallel to the plane of the wire coil; and an out-of-plane vibration signal , generator for providing input signals to the wire coil.*

Re claim 39, while, Hoshino et al. disclose of the vibroacoustic emulator for emulating vibroacoustics of a hard disk drive, comprising: a housing having: a base side defining in-plane directions parallel to the base side and an out-of-plane direction perpendicular to the in-plane directions; a cover side substantially parallel to the base side; the housing having dimensions and mechanical attachment fixtures that replicate those of the hard disk drive; and a vibroacoustic , generator coupled to the housing comprising an out-of-plane vibration source.

However, none of the prior art of records disclose of the *wherein the out-of-plane vibration source comprises: a support element coupled to the housing; a piezoelectric stack having a proximal end and a distal end, the piezoelectric stack being coupled at its proximal end to the support element and an end mass coupled to the distal end of the piezoelectric stack*.

Re claim 40, while, Hoshino et al. disclose of the vibroacoustic emulator, comprising: a housing; and a means for producing controlled variable vibroacoustic signals that simulate those of a hard disk drive, wherein the means is coupled to the housing and comprises: with the housing has dimensions and mechanical attachment fixtures that replicate those of the hard disk drive being emulated and the housing is disposed in an electronic device where a hard disk drive would be positioned.

However, *none of the prior arts of record disclose of the out-of-plane actuator for producing vibrations perpendicular to the plane of the in-plane actuators; and an out-of-plane signal , generator for providing input signals for driving the out-of-plane actuator*.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Disler Paul whose telephone number is 571-270-1187. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chin Vivian can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DP

VIVIAN CHIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600